

The Administrator signed the following rule on February 7, 2008 and we are submitting it for publication in the *Federal Register*. While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming *Federal Register* publication or on GPO's Web Site. Publication is expected in February 2008. You can access the *Federal Register* at: www.gpoaccess.gov/fr/index.html. When using this site, note that text files may be incomplete because they don't include graphics. Instead, select "Adobe Portable Document File (PDF) files.

ENVIRONMENTAL PROTECTION AGENCY

[FRL_XXXX-X]

Revised Renewable Fuel Standard for 2008, issued pursuant to section 211(o) of the Clean Air Act as Amended by the Energy Independence and Security Act of 2007

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Section 211(o) of the Clean Air Act (CAA or the Act), as amended by the Energy Independence and Security Act of 2007 (EISA), requires the Administrator of the Environmental Protection Agency (EPA) to annually determine a renewable fuel standard (RFS) which is applicable to refiners, importers and certain blenders of gasoline, and publish the standard in the Federal Register. On the basis of this standard, each obligated party determines the volume of renewable fuel that it must ensure is consumed as motor vehicle fuel. This standard is calculated as a percentage, by dividing the amount of renewable fuel that the Act requires to be blended into gasoline for a given year by the amount of gasoline expected to be used during that year, including certain adjustments specified by the Act. In this notice we are publishing an RFS of 7.76% for 2008. This

standard is intended to lead to the use of 9 billion gallons of renewable fuel in 2008, as required by amended section 211(o). This standard supersedes the 2008 RFS that EPA published on November 27, 2007, before enactment of the EISA.

FOR FURTHER INFORMATION CONTACT: Chris McKenna, Environmental Protection Agency, MC 6406J, 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone number: 202-343-9037; fax number: 202-343-2801; email address: mckenna.chris@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Calculation of the 2008 RFS

A. Background

On November 27, 2007, EPA published a Notice in the Federal Register announcing a renewable fuel standard for 2008 of 4.66%. This standard was designed to result in the use of 5.4 billion gallons of renewable fuel in 2008, as required by CAA section 211(o) at the time EPA published the standard. On December 19, 2007, President Bush signed into law the Energy Independence and Security Act of 2007 (EISA), which, among other things, amended CAA section 211(o) to require the use of 9.0 billion gallons of renewable fuel in 2008. Today's Notice announces the recalculated standard for 2008, based on the volume of renewable fuel that amended section 211(o) now requires.

In today's notice we are using the calculational procedure set forth in the final rulemaking for the Renewable Fuel Standard Program, as we did in the November 27, 2007 Notice. The formula includes a variable representing the volume of renewable fuel required by section 211(o), and EPA is today using that formula with the renewable fuel volume for 2008 required by the EISA amendments to section 211(o) to recalculate the RFS for 2008. Since the RFS rule establishes clear legal criteria for deriving the standard (including specification of the formula used in today's notice, and all data sources), EPA is simply applying facts to pre-established law in issuing the re-calculated final 2008 RFS. EPA is advising the regulated community of the revised standard through a Federal Register Notice, without prior notice and comment, in accordance with the Clean Air Act and EPA regulations.

The 2008 RFS is calculated by dividing the volume of renewable fuels required by CAA section 211(o) to be blended into gasoline in 2008, by the volume of gasoline projected by the Energy Information Administration (EIA) to be consumed in 2008 (including certain adjustments specified by the Act). The following equation from the final RFS Program regulations summarizes all of the variables that must be considered in the calculation.

$$RFS_{std_i} = 100 \times \frac{RFV_i - Cell_i}{(G_i - R_i) + (GS_i - RS_i) - GE_i}$$

Where

RFS_{std_i} = Renewable Fuel Standard in year i, in percent

RFV_i = Annual volume of renewable fuels required by section 211(o)(2)(B) of the

	Act for year i, in gallons
$G_i =$	Amount of gasoline projected to be used in the 48 contiguous states, in year i, in gallons
$R_i =$	Amount of renewable fuel blended into gasoline that is projected to be consumed in the 48 contiguous states, in year i, in gallons
$GS_i =$	Amount of gasoline projected to be used in Alaska, Hawaii, or a U.S. territory in year i if the state or territory opts-in, in gallons
$RS_i =$	Amount of renewable fuel blended into gasoline that is projected to be consumed in Alaska, Hawaii, or a U.S. territory in year i if the state or territory opts-in, in gallons
$GE_i =$	Amount of gasoline projected to be produced by exempt small refineries and small refiners in year i, in gallons (through 2010 only unless exemption extended under §§ 211(o)(9)(A)(ii) or (B)).
$Cell_i =$	Beginning in 2013, the amount of renewable fuel that is required to come from cellulosic sources, in year i, in gallons (250,000,000 gallons minimum)

EISA section 210(a)(1) also states that, “For calendar year 2008, transportation fuel sold or introduced into commerce in the United States (except in noncontiguous States or territories), that is produced from facilities that commence construction after the date of enactment of this Act shall be treated as renewable fuel within the meaning of section 211(o) of the Clean Air Act only if it achieves at least a 20 percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions.” EISA further provides that for 2008 and 2009, any ethanol plant that is fired with natural gas, biomass or any combination thereof is deemed to be in compliance with the 20 percent lifecycle greenhouse gas reduction requirement. Based on the text of this section, which is not an amendment to section 211(o) of the CAA and is not covered by the rulemaking provision in EISA section 202(a)(1) (amending section 211(o)(2)(A)(i)), EPA believes that these 2008

requirements are self-implementing, and therefore immediately effective. EPA intends to address the meaning of the term “commence construction”, and also address what transportation fuels other than ethanol from a facility fired by natural gas, biomass or some combination of the two satisfy the 20 percent lifecycle greenhouse gas reduction requirement, in the context of a proposed rule designed to implement the EISA amendments to the RFS program. EPA further notes, however, that it is unlikely that any facilities for the production of transportation fuel that commence construction following enactment of EISA will be operational during 2008. Therefore, the 20 percent lifecycle greenhouse gas reduction requirement is unlikely to have a real-world impact for 2008.

While EISA requires a substantial change in the 2008 RFS, we believe that the required renewable production capacity will come on line this year. In addition, at current oil prices, we would expect it to be economic to use the volume of renewable fuel required by EISA for 2008. We also believe RINs generated in excess of the 2007 RFS can be applied to the 2008 RFS to provide additional flexibility to the fuel supply market. However, we recognize that in the short term there may be some catching-up required for the distribution infrastructure to deliver the required volume of renewable fuel.

B. Data Sources for 2008 RFS Calculation

The following discussion describes the sources of data for the variables in the above equation. For ease of calculation, this discussion regroups the terms $(G_i - R_i) + (GS_i - RS_i)$ in the denominator of the above equation into the terms $(G_i + GS_i) - (R_i +$

RS_i).

Calculation of $(RFV_i - Cell_i)$, total amount of renewable fuels from non-cellulosic sources that must be blended into gasoline in 2008

The EISA amended CAA section 211(o) to require 9.0 billion gallons of renewable fuels to be blended into gasoline in 2008. Since the amended CAA section 211(o) does not include a cellulosic volume requirement until 2013, the amount of renewable fuel required to be produced from cellulosic sources in 2008 ($Cell_i$) remains, zero. Thus the total amount of renewable fuels from non-cellulosic sources that must be blended into gasoline in 2008 is 9.0 billion gallons.

Calculation of $(G_i + GS_i)$, total amount of gasoline projected to be used in the 48 contiguous states plus opt-in states/territories, in year i, in gallons

CAA section 211(o) requires the Administrator of the EIA by October 31 of each year to provide EPA with an estimate of the volumes of gasoline projected to be sold or introduced into commerce in the United States for the following year. During the development of the RFS Program, EIA informed EPA that the projected gasoline consumption in “Table 4a: U.S. Petroleum Supply, Consumption, and Inventories” (formerly “Table 5a. U.S. Petroleum Supply and Demand: Base Case”) of the October issue of the monthly *Short-Term Energy Outlook* (STEO) should be used to calculate the RFS for the coming year. The October 2007 STEO projects that an average of 9.42

million barrels/day of gasoline will be consumed in all of the United States in 2008.

Multiplying this average consumption rate by 366 days (2008 is a leap year) produces a total consumption of 144.80 billion gallons of gasoline in 2008.

Only one non-contiguous state or territory has petitioned EPA to opt into the RFS Program beginning in 2008. Hawaii petitioned EPA on June 22, 2007 to opt into the RFS program, and EPA approved their request.¹ Thus, Alaska is the only one of the 50 states that is not included in the RFS Program.

In order to calculate gasoline consumption in the 48 contiguous states plus Hawaii, we subtracted Alaska's projected gasoline consumption from the projected nationwide gasoline consumption of 144.80 billion gallons. Alaska's projected gasoline consumption was calculated by multiplying the projected nationwide gasoline consumption in 2008 by the ratio of Alaska's gasoline consumption in 2006 to the total U.S. consumption in 2006, based on Table 48, "Prime Supplier Sales Volumes of Motor Gasoline by Grade Formulation, PAD District, and State" gasoline data from EIA's *Petroleum Marketing Annual 2006* (the final rulemaking used data from *Petroleum Marketing Annual 2005*). According to EIA, Prime Supplier data reflects where gasoline is used, rather than where it is produced.² Alaska's projected gasoline consumption in 2008 is 0.30 billion gallons. Subtracting this consumption from the projected nationwide consumption of 144.80 billion gallons in 2008 produces a total consumption of 144.50

¹ Letter to the Honorable Linda Lingle, Governor of Hawaii, from Stephen Johnson of EPA dated July 30, 2007.

² Energy Information Administration, *Petroleum Marketing Annual 2006*, Explanatory Notes, Relationship of Refiner and Prime Supplier Sales Volumes" (p. 382).

billion gallons of gasoline in 2008 in the 48 contiguous states plus Hawaii.

Calculation of $(R_i + RS_i)$, total amount of renewable fuel blended into gasoline that is projected to be consumed in the 48 contiguous states plus opt-in states/territories, in year i, in gallons

The projected gasoline consumption in the October 2007 STEO includes renewable fuel that is blended into gasoline. This volume of renewable fuel must be subtracted from the total volume of gasoline in order to calculate the total consumption of non-renewable gasoline. In Table 8 of the October 2007 STEO, EIA estimates that 0.755 quadrillion Btu of ethanol will be used as transportation fuel in all of the United States in 2008. Dividing this energy usage by the high heating value of ethanol (3.539 million Btu/barrel), and multiplying by 42 gallons/barrel produces a total ethanol usage of 8.96 billion gallons nationwide in 2008.

Since Hawaii has opted in, but Alaska has not opted in, to the RFS program for 2008, Alaska's renewable fuels consumption must be subtracted from the nationwide renewable fuels consumption to calculate renewable consumption in the 48 contiguous states plus Hawaii. In Chapter 2 of the Regulatory Impact Analysis for the RFS program rulemaking, EPA estimated that ethanol consumption in Alaska would be negligible prior to 2012. Thus, we project renewable fuels consumption in the 48 contiguous states plus Hawaii to be 8.96 billion gallons in 2008.³ For purposes of recalculating the 2008 RFS,

³ Table 2.2-21 "2012 Forecasted Ethanol Consumption by State," Regulatory Impact Analysis: Renewable Fuel Standard Program, April 2007.

we will round this value to 9.0 billion gallons, which is equivalent to the volume of renewable fuel required by amended section 211(o) for 2008.

Calculation of GE_i , amount of gasoline projected to be produced by exempt small refineries and small refiners in year i , in gallons⁴

In the final rulemaking establishing the RFS program regulations, we stated that we would estimate the combined small refinery and small refiner gasoline volume using a constant percentage of national consumption. Using information from gasoline batch reports submitted to EPA, EIA data and input from the California Air Resources Board regarding California small refiners, we estimated this percentage to be 13.5%.⁵

Multiplying the projected nationwide consumption of gasoline in 2008 (144.80 billion gallons) by 13.5% results in a total projected production of 19.55 billion gallons of gasoline from small refiners and small refineries in 2008.

Calculation of $RFStd_i$, renewable fuel standard in year i , in percent

Substituting all of the terms calculated above into the equation for $RFStd_i$ results in the following RFS for 2008,

⁴ Through 2010 only, unless the exemption is extended under 211(o)(9)(A)(ii) or (B) of the Act.

⁵ “Calculation of the Small Refiner/Small Refinery Fraction for the Renewable Fuel Program,” memo to the docket from Christine Brunner, ASD, OTAQ, EPA, September 2006.

$$RFS_{di} = 100 \times \frac{9.0}{144.50 - 9.0 - 19.55} = 7.762\%$$

Therefore, the RFS for 2008 is 7.76%. This is the standard referenced in 40 CFR 80.1105(b) through (d) and which obligated parties apply to determine their renewable volume obligation under 40 CFR 80.1107. This recalculated 2008 RFS supersedes, and therefore replaces for all purposes, the 2008 standard published by EPA on November 27, 2007.

Signed:

Stephen L. Johnson

Administrator

Date